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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,296	12/27/2001	Yasutaka Ito	214810US0PCT	4965

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EXAMINER

THOMAS, ALEXANDER S

ART UNIT	PAPER NUMBER
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1772

6

DATE MAILED: 10/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-6

<b>Office Action Summary</b>	<b>Application No.</b> 09/926,296	<b>Applicant(s)</b> ITO ET AL.	
	<b>Examiner</b> Alexander S. Thomas	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____                                    |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent document ('064) in view of the Japanese patent documents ('607) and ('655). The primary reference discloses the invention substantially as claimed; see the Abstract. However it does not disclose the claimed substrate materials. The secondary references disclose similar articles having a substrate formed from nitrides, carbides and oxygen; see the Abstracts. It would have been obvious to one of ordinary skill in the art to use the substrate materials of the secondary references in the article of the primary reference to provide a substrate with long term stability in the absence of unexpected results attributable to the claimed materials.

3. Claims 1-4 and 6-11 rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent documents ('655) or ('607) each in view of either applicants' acknowledged state of the art or the Japanese patent document ('064). The primary references disclose the invention substantially as claimed; see the Abstracts. However they do not disclose the claimed size of the substrate. The secondary references each disclose semiconductor handling substrates sized within the claimed ranges; see the paragraph bridging pages 1 and 2 of the instant specification. It would have been obvious to one of ordinary skill in the art to adjust the size of the substrates in the articles of the primary references to a size within the instantly claimed ranges in view of

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the teachings of the secondary references where it is disclosed that larger semiconductors have been made in recent years.

4. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent documents ('655) or ('607) each in view of either applicants' acknowledged state of the art or the Japanese patent document ('064) as applied to claims 1-4 and 6-11 above, and further in view of either the Japanese patent document ('330) or Burkart et al. The Japanese patent document ('330) and Burkart et al. each disclose the use of holes and lifters in a semiconductor handling substrate; see the Figures. It would have been obvious to one of ordinary skill in the art to use holes and lifters in the semiconductor handling substrates of the primary references in view of these secondary teachings, depending on the end use of the handling device.

5. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent document ('064) in view of the Japanese patent documents ('607) and ('655) as applied to claims 1-4 and 6 above, and further in view of either the Japanese patent document ('330) or Burkart et al. The Japanese patent document ('330) and Burkart et al. each disclose the use of holes and lifters in a semiconductor handling substrate; see the Figures. It would have been obvious to one of ordinary skill in the art to use holes and lifters in the semiconductor handling substrate of the primary reference in view of these secondary teachings, depending on the end use of the handling device.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander S. Thomas whose telephone number is 703-308-2421. The examiner can normally be reached on M-F 6:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read "Alexander S. Thomas". The signature is fluid and cursive, with the first name "Alexander" being more prominent than the last name "Thomas".

ALEXANDER S. THOMAS  
PRIMARY EXAMINER